## 2014 NEC Changes Part 1 (Homestudy) Utah COURSE OUTLINE

**Credit Hours** 

8 Hours

Course Timetable

Attached

**Course Description** 

This homestudy code course reviews 100 important changes from Articles 100 – 404.2 of the 2014 National Electrical Code. Each section on the code change includes an illustration, commentary about the change, and details on the significance of the change. Each section also presents a multiple choice question, with four possible answers.

**Course Objectives** 

After completing this course the participant will be able to apply the changes to the National Electrical Code in everyday wiring practice.

**Method of Presentation** 

This homestudy course requires participants to answer multiple choice questions after reviewing the selected sections of the 2014 National Electric Code Changes. Homestudy answer choices are generated randomly per user to ensure tests are individualized. After all questions have been answered, participants must complete an attestation statement to affirm their identities and veracity of the course completion.

**Method of Evaluation** 

The course participant must complete all 100 individualized multiple choice questions with a score of at least 75% in order to get credit for the course. Credit will not be awarded unless the participant has completely answered all questions and met or exceeded the 75% accuracy benchmark.

**Qualification of Instructor** 

Resume of course instructor, David Burtt, is attached.



Question	Section	Time
1	00. Code Wide, Adequate, Inadequate, Sufficient	(minutes)
2	00.Code Wide, Voltage Threshold	4
3	100 Definitions. Battery System	4
4	100 Definitions. Retrofit Kit	4
5	100. Definitions. Switchgear	4
6	100. Definitions. Switchgear  100. Definitions. Coordination (Selective)	4
7	100. Definitions. Coordination (Selective)	4
8	100. Definitions. Ground Fault Current Path	4
9		4
10	100. Definitions. Grounding Conductor, Equipment (EGC) 100. Definitions. Intersystem Bonding	4
11		4
12	100. Definitions. Premises Wiring (System), Information Note (New) 100. Definitions. Separately Derived System	4
13		4
14	110.16 Arc Flash Hazard Warning signage meet 110.21(B)	4
15	110.21(B) New Field-Applied Hazard Markings.	4
16	110.24, Available Fault Current. Informational Note (New)	4
17	110.25 Lockable Disconnecting Means	4
18	110.26(C)(3) Spaces About Electrical Equipment. Entrance to and	4
19	110.26(E)(2) Dedicated Equipment Space. Outdoor.	4
20	110.27(A) Guarding of Live Parts	4
	200.4 Neutral Conductors	4
21	210.4(D)Multiwire Branch Circuits. Grouping.	4
22	210.5(C) Branch Circuits. Identification of Ungrounded Conductors	4
23	210.8(A)(7) GFCI for Personnel. Sinks	4
24	210.8(A)(9) Bathtubs or shower stalls	4
25	210.8(A)(10) GFCI Protection for Personnel. Laundry areas	4
26	210.8(B) GFCI Protection for Personnel. Other Than Dwelling Units. Exception No.	4
27	210.8(B) Other Than Dwelling Units (Garages, Service Bays)	4
28	210.8(D) Kitchen Dishwasher Branch Circuit.	4
29	210.12 AFCI Protection Overall	4
30	210.12(A)(1) - (A)(6) AFCI Protection Dwelling Units	4
31	210.12(B) (Exception) AFCI	4
32	210.12(C) AFCI Protection Dorms	4
33	210.13(New) Ground Fault Protection of Equipment	4
34	210.17 Electric Vehicle Branch Circuit	4
35	210.19(A)(1) Branch Circuits Not More Than 600 Volts.	4
36	210.50 Required Outlets. General. Ref. to ADA material/Annex J	4
37	210.52(E)(1) Outdoor Dwelling Unit Receptacles	4
38	210.52(E)3) Balconies, Decks	4
39	210.52(G) Receptacle Outlets. Basements, Garages, Accessory Buildings	4
40	210.52(I) Dwelling Unit Receptacle Outlets - Foyers.	4
41	210.64 (New) Receptacles. Electrical Service Areas	4
42	215.2(A)(1) Minimum Rating and Size. Feeders Not More Than 600 Volts.	4

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43	215.12(C) ID of DC feeders. Ungrounded Conductors (Same as branch circuit)	4
44	220.12 Exception. Lighting Load for Specified Occupancies.	4
45	22F 10 22F 21 coo 2F0 104/AV/2\ P 2C4 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
46	225.10, 225.21 see 250.104(A)(3) P.264 Wiring on Buildings or Other Structures	4
47	225.36. Also for 225.38 Outside Branch Circuits and Feeders. Type 225.52(A) Disconnecting Means. Location	4
48	225.56(A)Pre-Energization and Operating Tests.	4
49	225.70 Substations (Deleted)	4
50	230.28 Service Masts as supports	4
51		4
52	230.30 Underground Service Conductors Installation 230.44 Cable Trays	4
53		4
54	230.82(3) Equipment Connected to the Supply side of Service	4
55	240.21(B)(1) Overcurrent Protection. Feeder Taps. Not over 10 ft Long. 240.87 Arc Energy Reduction	4
	240.87 Art Ellergy Neduction	4
56	250.24(A)(1)Grounding Service-Supplied Alternating-Current Systems. General.	4
57	250.30 Grounding Separately Derived Alternating-Current Systems.	4
58	250.64(B) Grounding Electrode Conductor Installation	4
	250.64(D)(1) Building or Structure with Multiple Disconnecting Means in Separate	
59	Enclosures	4
60	250.64(E)(1) through (4) Raceways and Enclosures for GEC	4
	250.66(A)&(B) Connections to a Rod, Pipe, or Plate Electrode, Concrete-Encased	
61	Electrodes	4
62	250.68(C) Grounding Electrode Connections	4
63	250.102(C) New Table	4
64	250.119 Identification of Equipment Grounding Conductors	4
65	250.122(B) Size of Equipment Grounding Conductors. Increased in Size.	4
66	250.130(C) Nongrounding Receptacle Replacement or Branch Circuit Extensions	
67	250.166 Size of DC Grounding Electrode Conductor	4
68	250.167 (New) DC Ground Fault Detection	4
69	250.186(New) Ground Fault Circuit Conductor to Service Equipment	4
70	250.194 Grounding and Bonding of Fences and Other Metal Structures	4
71	300.11(B)(1) Securing and Supporting	4
72	300.22(C)(1) Plenums Wiring Methods.	4
73	300.38 New Raceways in Wet Locations Above Grade.	4
	310.15(B)(3)(a) Adjustment Factors for More Than Three Current-Carrying	4
74	Conductors	1
75	310.15(B)(3)(c) Ex. And Table	4
76	310.15(B)(7) (Table) Deletion	4
77	310.15(B)(7) Example D7	4
78	314.15 Damp or Wet Locations	4
79	314.25-Covers and Canopies.	4
80	314.27(A)(1) Vertical Surface Outlets.	
81	314.27(C).Boxes at Fan Outlets	4
02		4
82	314.28(A)(3) Smaller Dimensions	4

	Time Requirement (in minutes):	400
	Total Time (in minutes)	400
100	404.2(C) New Switches Controlling Lighting Loads.	4
99	400.7(A)(11) Flexible Cords and Cables. Uses Permitted.	4
98	400.4 (Table) and 400.4, Table 400.4, 400.6(A) Russ LeBlanc	4
97	393 New Low Voltage Suspended Ceiling Power Distribution Systems	4
96	392.20(A) and (B) Cable and Conductor Installation. Multiconductor Cables Operating at 600 Volts or Less.	4
95	392.18(H) and new exception, Cable Tray Marking	4
94	386.120 Marking Surface Metal Raceways	4
93	376.56(B)(5) (New), Metal Wireways Power Distribution Blocks	4
92	376.22(B), Metal Wireways Number of Conductors	4
91	370, Reorganization, .10, .12 Cablebus	4
90	350.42, LFMC Couplings	4
89	348.30(A) Ex No 4 Securing and Supporting	4
88	344.2 and 344.100 RMC and Construction	4
87 .	334.40(B) Boxes and Fittings. Devices of Insulating Material.	4
86	334.10 NM Cable Uses Permitted	4
85	330.30(D)(3) (New) Unsupported Cables.	4
84	330.30(B) Securing and Supporting MC Cable	4

## David C. Burtt

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P.O. Box 17228 Raleigh, NC 27619

Education

Bachelor of Arts, Bates College

Master of Divinity, Union Theological Seminary

Licenses

9665-U

North Carolina Electrical Contracting

40619E

Massachusetts Journeyman California Electrical Journeyman

104880 BURTTDC953KL

Washington State Administrator

**Work Experience** 

2004 to Present

President, JADE Learning, Inc.

JADE Learning is an educational company providing online and in person training on the National Electrical Code and other trade related topics.

2003

President JADE Construction College, Inc.

JADE Construction College provided continuing education courses for

electrical license renewal.

1996-2002

President, JADE Electric, Inc.

**Technical Skills Training Company** 

JADE Electric developed and delivered classes on the National Electrical

Code.

1990-1995

**Technical Instructor** 

Allen-Bradley Company

Taught classes on programmable controllers.

1987-1990

**Technical Specialist** 

Electrical Supply and Equipment Co.

Provided technical support for Allen-Bradley Programmable Controllers.

1983-1987

Instructor, Electrical Installation and Maintenance

Rockingham Community College

Taught a 1-year certificate program for entry level electricians

1983-1994

Owner, JAECO Electric

Part-Time Electrical Contracting Company

**Professional Organizations** 

National Fire Protection Association

International Association of Electrical Inspectors Wake County Association of Electrical Contractors

**Publications** 

Commercial Blueprint Reading, Residential Wiring, 2005 National

Electrical Code Changes, 2008 National Electrical Code Changes, House Wiring, According to the 2008 National Electrical Code, Services and Grounding, Commercial & Industrial Wiring, 2011 NEC Changes, 2014

**NEC Changes**